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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,085	11/26/2003	Joseph S. Glider	ARC920030081US1	7870

7590 09/14/2006

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EXAMINER

WEI, ZHENG

ART UNIT PAPER NUMBER

2194

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/723,085	<b>Applicant(s)</b> GLIDER ET AL.	
	<b>Examiner</b> Zheng Wei	<b>Art Unit</b> 2194	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11/26/2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/26/03, 04/20/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to the application filed on 11/26/2003

Inventor: Glider et al.

Claims 1-20 are pending and have been examined.

### ***Oath/Declaration***

2. The Oath/Declaration is objected since it does not comply with 37 CFR 1.63 and is considered to be informal:

- It does not identify the citizenship of each inventor.
- It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either an application data sheet or supplemental oath or declaration.
- It does not identify the residence (eg., city and either state or foreign country) of each inventor.

### ***Information Disclosure Statement***

3. The information disclosure statement filed on April 20, 2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because it is filed with a different inventor name and title. So it is not considered by examiner.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3-5: Applicant claims a distributed system software application including a plurality of nodes holding non-volatile memory data structures. However, the software application is not possible to include hardware element, like "node".

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1-5, 7-11, 13 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinander (Niklas Sinander, US 6,385,770 B1)

Claim 1, 7, 13 and 15: Sinander discloses a method and system for upgrading a software application utilizes all kinds of data, said method and system comprising:

- Applying an upgrade to a first part of an upgrade framework to upgrade system software; ( Col 3, Lines 54-58)

- Executing a plurality of upgrade contents to convert data structure; (Col2, Lines 6-16)
- Applying an upgrade to a second part of the upgrade frame to upgrade system software; ( Col 3, Lines 54-58)

But Sinander does not disclose any further step of data conversion after the second part of software upgrade. However Sinander puts a plurality of upgrade contents processes between the first and second level of software upgrade. It would have been obvious to one having ordinary skill in the art at time the invention was made that reconfigures the sequence of execution the plurality of upgrade contents and executes some “upgrade contents” steps after finishing the second part software upgrade. Therefore, one would have been motivated to execute another upgrade contents step after applying the second part of software upgrade to convert the old data structure format to new data structure format. Sinander also does not disclose the software upgrade that can understand both old and new data structure format, but this is a well known feature in the art at the time the invention was made that most of the new versions of software have backward compatibility that can understand both old and new formats of data or files. (For example, Microsoft Office 2000 software can understand both old format data – Office97 files and new Office2000 format file.)

Claim 2, 8 and 16: Sinander discloses a system and method to upgrade software application utilizes persistent data as in claims 1, 7, and 15 above, but does not explicitly disclose that the persistent data structures comprise communication packet structures. However, Sinander further discloses the system and method for software upgrade could be used in a real time applications of telecommunications network ( Col1, Line41-44) and switch communication links (Col2, Line36). That would have been obvious to one having ordinary skill in the art at time the invention was made to undersand that these networks, like ATM, IP networks use packet (ATM cells or IP packet) for communication based on different kinds of network protocols. Therefore, one would have been motivated

to use persistent data structure to represent the packet structure in software programming in order to make software implementation simpler and easier.

Claim 3, 9 and 17: Sinander discloses a system and method to upgrade software application as in claims 2, 8 and 16 above and Sinander further discloses that the distributed system including a plurality of nodes (Co.10, lines 47-50, "In case the source system is operating a mobile telephone network, the devices may be mobile telephones or nodes of the network.") holding non-volatile memory data structure. (Col.6, lines 36-48),

Claims 4, 10 and 18: Sinander discloses a system and method to upgrade software application as in claims 3, 9 and 17 above and Sinander also discloses that said nodes communicate with one another. (Col.10, lines 47-50, "In case the source system is operating a mobile telephone network, the devices may be mobile telephones or nodes of the network."). Therefore, it is obvious for a person with ordinary skill in the art at time the invention was made to understand that the "mobile telephone or nodes of the network" can communicate to each other.

Claims 5, 11 and 19: Sinander discloses a system and method to upgrade software application as in claims 4, 10 and 18 above and Sinander further discloses that said nodes communicate with one another. (Col.10, lines 47-50, "In case the source system is operating a mobile telephone network, the devices may be mobile telephones or nodes of the network."). Therefore, it would have been obvious to one having ordinary skill in the art at time the invention was made to understand that said nodes, like mobile telephones or nodes in networks can use communication packet to communicate between each other.

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5. Claim 6, 12, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinander (Niklas Sinander, US 6,385,770 B1) in the view of Moore ( Moore et al., US 2003/0092438 )

Claims 6, 12, 14 and 20: Sinander discloses a system and method to upgrade software application utilizes persistent data as in claims 1, 7, 13 and 15 above, but does not disclose the method for software version downgrade. Moore discloses a similar method and apparatus for a system upgrade or downgrade.

- Applying a downgrade to a previous level of software. (Fig.3, items 102)
- Converting all persistent data structures into the old persistent data structure format. (Fig.3, item 112)
- Applying a downgrade to a second previous level of software that understands said old persistent data structure formats. (Fig.4, items 116-122)

It would have been obvious to one having ordinary skill in the art at time the invention was made to use Moore's method to downgrade Sinander's software version. One would have been motivated to do so, because Sinander's system does not provide a method to downgrade current running software to the previous version and convert new persistent data format to the old one. If current version software has a bug and needs to roll back to the previous version and old data format, it can use Moore's downgrade method to roll back.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Earl et al. (US 6,996,058) discloses a system and method for managing software upgrades in a distributed computing system;

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- Blinick et al. (US 2005/0114685) discloses an apparatus, system and method for updating an embedded code image;
- Bakke et al. (US 2003/0177486 A1) discloses a method and system for performing sw upgrade in a real-time system;
- Jacobi et al. (US 2004/0226008 A1) discloses an update system for facilitating software update and data conversion in an electronic device;
- Gard et al. (US 6,347,396 B1) discloses a disturbance free update of data;
- Helgesen et al. (US 2003/0093688 A1) discloses a method for automation of software upgrade.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059. The examiner can normally be reached on Monday-Thursday 14:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Myhre can be reached on (571) 270-01065. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic



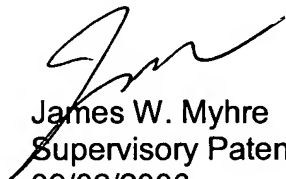
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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ZW  
05/30/2006



James W. Myhre  
Supervisory Patent Examiner  
09/06/2006